

# Massachusetts Department of Agricultural Resources (MDAR) Apiary Program Update Mass Bee Newsletter – Spring 2020



## Have a Dead-Out or Expired Honey Bee Colony and Need Help?

Consult the MDAR Managing Honey Bee Colony Dead-Outs information bulletin for additional support:

<https://www.mass.gov/doc/managing-honey-bee-colony-dead-outs/download>.



### MANAGING HONEY BEE COLONY DEAD-OUTS

**Close Colony To Prevent Robbing**  
Secure entrance to prevent bees from entering and robbing resources from the dead-out.

**Send Bee Sample To Lab**  
Send a sample of adult bees and brood using guidelines from USDA Beltsville Bee Lab. Request testing for Nosema, Tracheal mites, Varroa mites, European Foulbrood and American Foulbrood.

**Do An Alcohol Mite Wash**  
Take a sample from the population of adult bees and perform an alcohol mite wash. Consult the MDAR Apiary Program Varroa mite brochure for more information.

**Check For Starvation**  
Evaluate all frames to determine how many frames of stored and capped honey are in the colony. Check to see if adult bees have died suspended with their bodies in cells.

**Check For Weather Issues**  
Examine honey frames for crystallization to determine if honey was frozen and unable to be consumed. Look to see if cluster size was adequate to maintain nest climate.

**Check For Development Issues**  
Analyze brood frames to determine if colony development, cluster size and queen quality was adequate for survival.

**Diagnosis Issue(s)**  
Using the information from criteria above, consult the MDAR Apiary Program website resources to diagnosis the issue(s). Visit <https://www.mass.gov/api/apiary-program-honey-bees> to learn more.

**Clean Equipment**  
Discard old, dark-colored brood frames and those with moldy cells. Keep filled honey frames to re-use again unless colony was diseased. Store equipment to prohibit wax moth damage.

**Report Colony Health And Loss**  
Visit MDAR Apiary Program Honey Bee Health Survey on website and input data on loss to allow for state-wide data analysis on losses.

## Request a Kit to Submit a Sample for Lab Analysis?

### Think You May Have AFB or EFB?

Find Out With a **FREE** Sample Kit!




Bee Research Laboratory: Beltsville, MD

### Worried About Nosema or Varroa Mites?

Test Your Hive With a **FREE** Sample Kit!




Bee Research Laboratory: Beltsville, MD

### AFB/EFB Sample Kits



**Kit Includes:**

- Pre-labeled envelope
- 2 packs sterile Q-tips
- Labeled paper bag for samples

**Beekeeper Cost (per kit): ~\$3.00/postage**

### Nosema/Varroa Mite Sample Kits



**Kit Includes:**

- Pre-labeled envelope
- Wet sample secure bag
- Labeled outer plastic bag

**Beekeeper Cost (per kit): ~\$4.00/postage & alcohol**

These FREE kits are easy to use by following the provided instructions and materials. Samples are analyzed and results provided directly to the beekeeper from the USDA-Beltsville, MD Bee Lab within a few weeks after receipt. Currently, there is no fee to process samples so you only need to pay for postage to mail each kit. These kits are great to use on hives that die during winter to determine if any of these pathogens or parasites were an issue. Note that each kit contains materials to sample 1 hive.



## BEE AWARE: MA Honey Bee Health Survey Available Soon!

Let's see if we can beat 2018-19 response record of 673 beekeepers! The 2019-2020 MA Bee Aware Honey Bee Health survey link will be active starting April 1<sup>st</sup>, 2020 so be sure to save the date. The first 250 survey responses will receive a FREE – [Bee Aware](#) sign at the mailing address provided.

## GOT HONEY BEES?

Complete the MA BEE AWARE: Honey Bee Health Survey starting April 1st. First 250 responses get a **FREE** sign!

**Survey Link:**  
[bit.ly/2uecmxp](https://bit.ly/2uecmxp)

## Adding a New Colony of Package Bees or Nucs to Your Apiary this Year?



Remember all imported honey bee packages, nucleus colonies (nucs), colonies and used equipment brought into the state of Massachusetts require a health certificate and are subject to inspection upon arrival into the state. Be sure to check with your supplier to make sure they have submitted the proper documents to MDAR. Please contact the Apiary Program, [bees@mass.gov](mailto:bees@mass.gov) or 617-626-1801 with questions.

## Request Your 2020 Apiary Inspection Requests NOW!

Please consider taking a quick second to request your inspection for 2020 today to assist the MDAR Apiary Program Bee Team in planning to meet your needs in the upcoming bee season: <https://www.mass.gov/forms/mdar-apiary-inspection-request-form>. Note that given the inclement winter weather, we are no longer performing inspections of live honey bee hives until Spring 2020, but will continue to visit for Dead-Out or expired hives, as needed.

## Join the Apiary Program Mailing List!

We recently added the option for folks to receive email alerts and program updates: <https://www.mass.gov/forms/join-the-apiary-program-mailing-list>. There are currently **325 people** on the list. Please consider signing up now to stay up to date on our efforts to improve honey bee health in Massachusetts!

## BEE a Steward and Incorporate Pollinator Friendly Native Plants in Your Garden!

### CREATING POLLINATOR-FRIENDLY GARDENS WITH NATIVE PLANTS: LOCALLY-AVAILABLE OPTIONS

Interested in improving pollinator resources on your property? The Massachusetts Department of Agricultural Resources has developed this list of native plant species commonly available at local nurseries. It includes basic information about flower color, light and soil moisture requirements, and flowering time, so that you can create habitat that supports a wide variety of insects.

#### Tips:

- Each section is organized by flowering season - choose a suite of species that provide pollinator resources in spring, summer, and fall
- Place plants in sweeps (several of the same species planted along a curve) to make it easier for pollinators to find the plants they prefer
- Support the greatest diversity of pollinator insects by selecting a variety of flower colors, shapes, and sizes
- If you are looking for true native species, stick with the plants that have a checkmark in the "Native to New England" column
- Need help determining the species that will grow best on your property, or have other questions? Consult with your local nursery or landscaper

#### PERENNIALS

Name	Flower Color	Light	Moisture	Flowering Time	Native to New England	Native to Northeast
Allegheny spurge ( <i>Pachysandra procumbens</i> )	white	☀️	💧	spring	✓	✓
bloodroot ( <i>Sanguinaria canadensis</i> )	white, pink	☀️	💧	spring	✓	✓
Canada wild ginger ( <i>Asarum canadense</i> )	brown	☀️	💧	spring	✓	✓
golden star ( <i>Chrysogonum virginianum</i> )	yellow	☀️	💧	spring		✓
marsh marigold ( <i>Caltha palustris</i> )	yellow	☀️	💧	spring	✓	✓
moss pink ( <i>Phlox subulata</i> )	white, blue, pink, red	☀️	💧	spring		✓
red columbine ( <i>Aquilegia canadensis</i> )	red, yellow, pink	☀️	💧	spring	✓	✓
wild blue phlox ( <i>Phlox divaricata</i> )	pink, lavender	☀️	💧	spring	✓	✓
creeping phlox ( <i>Phlox stolonifera</i> )	purple, blue, pink	☀️	💧	spring, summer		✓
Culver's root ( <i>Veronicastrum virginicum</i> )	white	☀️	💧	spring, summer	✓	✓
Eastern bluestar ( <i>Amsonia tabernaemontana</i> )	blue/purple	☀️	💧	spring, summer	✓	✓
foam flower ( <i>Tiarella cordifolia</i> )	white, pink	☀️	💧	spring, summer	✓	✓
sundrops ( <i>Oenothera fruticosa</i> )	yellow	☀️	💧	spring, summer	✓	✓
black cohosh ( <i>Actaea racemosa</i> )	white, light pink	☀️	💧	spring, summer, fall	✓	✓
fringed bleeding-heart ( <i>Dicentra eximia</i> )	pink to red	☀️	💧	spring, summer, fall		✓

Check out these new tools created specifically for Massachusetts residents which will help you make the right "bee-friendly" decisions and assist in planning "pollinator-inspired" gardens this Spring!


<https://www.mass.gov/service-details/choosing-pollinator-friendly-native-plants-in-home-gardening-or-landscaping>




## Think About and Plan for Varroa Mite Management Now!

Integrated Pest Management (IPM) Plan for Varroa Mites  Year: \_\_\_\_\_

Month	Supers on?	Colony Inspections?	Monitor for Mites?	Mite Threshold (/100 bees)	Non-Chemical Tools (year round)	Chemical Tools (if over threshold)
April						
May						
June						
July						
August						
September						
October						
November						
December/January/February/March						



MDAR 

## What's Your Varroa Mite Count?



Find Out With a **FREE** Alcohol Wash Jar!



Get a FREE alcohol wash jar, Varroa Mite IPM brochure and Planning tool that contains vital information designed to make you think, plan, learn, monitor and control mite populations in your hives. This practical sampling kit can be used for multiple hives and repeatedly throughout the season allowing for reliable monitoring. Limited quantities of these kits are available, so request yours today via email [bees@mass.gov](mailto:bees@mass.gov)!

## Upcoming FREE WEBINARS - Varroa Mite IPM: Four-Part Series for a Healthy Hive in 2020

Join Kim Skyrn (MDAR - Massachusetts) and Jen Lund (MDACF - Maine) and let's FIGHT THE MITE! in this multiple part webinar series where they will discuss the varroa mite biology and life history, available and effective mite management tools, how to create a dynamic varroa mite IPM plan, and a demonstration on the steps involved in performing an alcohol wash in the field including tips to make sure you get an accurate count. Participants will have an opportunity to ask questions and get real live support needed to jump start your thinking and planning for mite management this season.

**Monday, March 9<sup>th</sup>**, 1:00–2:30 p.m. — Varroa mite biology and life history

**Monday, March 23<sup>rd</sup>**, 1:00–2:30 p.m. — Varroa mite treatments

**Monday, April 6<sup>th</sup>**, 1:00–2:30 p.m. — Creating a varroa mite IPM plan

**Monday, April 20<sup>th</sup>**, 1:00–2:30 p.m. — Demonstration and Q&A of how to perform alcohol wash using the varroa mite IPM kit as a critical step in monitoring mite populations (includes FIELD demos!)

**To Register:** [https://cornell.zoom.us/webinar/register/WN\\_FwNfRD6pRgWgHArighWvYg](https://cornell.zoom.us/webinar/register/WN_FwNfRD6pRgWgHArighWvYg)

## Voluntarily Register Your Apiary!

The Apiary Registration Process is easier than ever with the online form:

<https://www.mass.gov/forms/apiary-and-colony-registration-form>. A total of **360 beekeepers** have registered their apiaries with MDAR since April, 2017 when this online form became available. Please consider taking a quick second to register your apiary today so that the MDAR Apiary Program Bee Team can better inform beekeepers about health related concerns in the vicinity of their apiary!

## Apiary Regulations Update

The updated Apiary Regulations will be available soon for review and public comment. A public hearing will follow their release. Stay tuned for additional updates.

## MDAR State Apiaries Update



Here is a quick update for the State Apiaries: the Amherst apiary went into winter with 13 hives and the Danvers location with 5 hives. The apiaries have been fed several times this winter with the latest feed (fondant and winter patties) lasting only around 7-10 days depending on the cluster size. Currently, there is only 1-Dead-Out hive in Amherst and 0-Dead-Outs in Danvers. Given the mild winter weather the hives have needed and consumed more winter feed than in years past. We hope they all make it through the winter and you will join us at future educational events to see these overwintered girls! Given this update, we urge you to check the status of your own apiary hives ASAP and be prepared to feed until Spring 2020!

## Mark Your Calendars for the 2020 Honey Bee Education Days at the State Apiaries

Join State the MDAR Apiary Program Bee Team to get a tour of live working honey bee colonies, hands-on demonstrations of hive management techniques, and exposure to the latest knowledge on how to best sustain healthy honey bee colonies. [These events](#) are free and open to the public, but focus on beekeepers. Registration is not necessary to attend. Participants must bring protective clothing as it will not be provided and is required to enter an apiary. The same program will be offered from 10am-12pm on each date at both apiary locations, unless specified otherwise. Alternate dates will be provided in the event of inclement weather. For more information visit: <https://www.mass.gov/service-details/mdar-state-apiaries>

### State Apiary Locations:

UMass Agricultural Learning Center (ALC) Farm  
911 North Pleasant St  
Amherst, MA 01002  
-park in the field adjacent to the apiary

Essex North Shore Agricultural and Technical High School ("Essex Aggie")  
565 Maples St  
Danvers, MA 01923

-park in the lot behind to the old Administration building (brick building across the street from main school entrance building - where the school buses are lined up, you will see a drive-able path near the larger parking lot where buses are located – look for apiary signs)



2020 Honey Bee Education Days at State Apiaries	
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	<b>May 9<sup>th</sup></b> Spring Management
	<b>May 16<sup>th</sup></b> Queen Workshop I [Amherst location only!]
	<b>May 23<sup>rd</sup></b> Queen Workshop II [Amherst location only!]
	<b>June 20<sup>th</sup></b> Summer Management
	<b>July 11<sup>th</sup></b> Pests, Parasites, & Pathogens
	<b>August 8<sup>th</sup></b> Fall Management I
	<b>August 22<sup>nd</sup></b> Honey Extraction [10am-2pm, Danvers location only!]
	<b>September 12<sup>th</sup></b> Fall Management II
	<b>October 10<sup>th</sup></b> Winter Prep
<b>MDAR State Apiary Locations</b>	
UMass Agricultural Learning Center (ALC) Farm 911 North Pleasant St Amherst, MA 01002	Essex North Shore Agricultural & Technical School (Essex Aggie) 565 Maples St Danvers, MA 01937



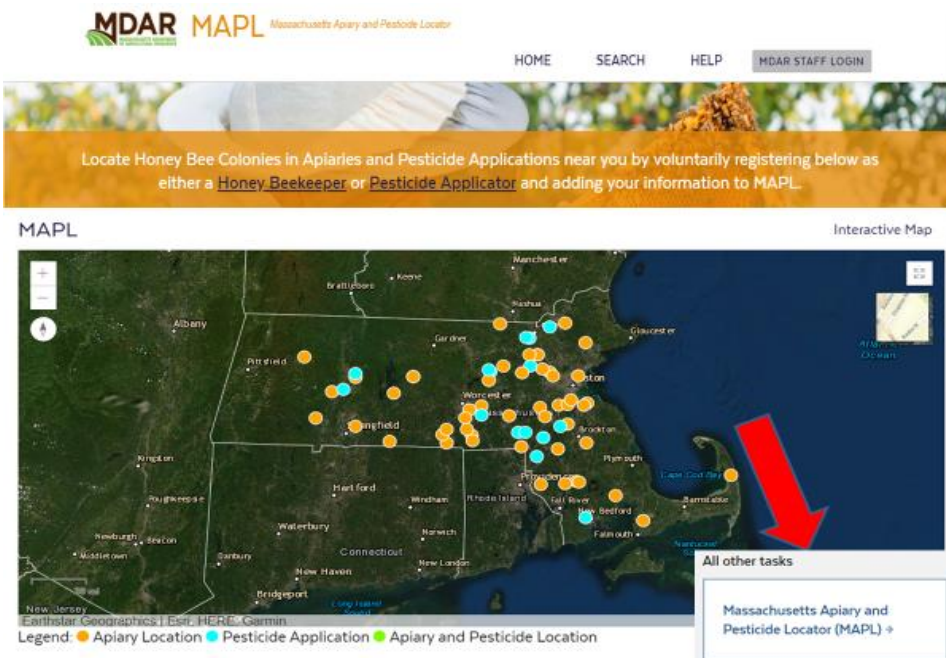
## 2019 Aerial Mosquito Application Honey Bee Hive Monitoring Report

A full report of the MDAR Apiary Program Team Monitoring efforts will be released as part of statewide report so stay tuned to see the results of the entire statewide efforts.

## 2019 Aerial Mosquito Application Monitoring



## Check Out [MAPL](#) – Massachusetts Apiary and Pesticide Locator!



Visit the new [interactive map](#) that was created to facilitate real time communication between beekeepers and pesticide applicators. Locate apiaries and pesticide applications near you by voluntarily registering as either a Honey Beekeeper or Pesticide Applicator. Participation in the map is voluntary and the information submitted is not verified.

## **Honey Bee Hive Pesticide Use**

The following is a list of U.S. Environmental Protection Agency (EPA) and Massachusetts registered pesticide products labeled for use in honey bee hives for Varroa mites. These product registrations are currently active and will expire on 6/30/2020. Stay up to date on current product registrations and label changes by visiting the Massachusetts Pesticide Product Registration Information website (<http://www.kellysolutions.com/MA/searchbypest.asp>) and search for “Varroa mite”.

### Listed in Order by Product Name (active ingredient (a.i.)):

1. Api-Bioxal (oxalic acid dehydrate), EPA Reg. No. 91266-1-73291;
2. ApiGuard (thymol), EPA Reg. No. 79671-1;
3. Api Life Var (menthol, eucalyptus oil, and thymol), EPA Reg. No. 73291-1;
4. Apivar (amitraz), EPA Reg. No. 87243-1;
5. CheckMite Plus (coumaphos), EPA Reg. No. 11556-138-61671;
6. CheckMite + Bee Hive Pest Control Strip (coumaphos), EPA Reg. No. 11556-138;
7. Formic Pro (formic acid), EPA Reg. No. 75710-3;
8. HopGuard II (potassium salts of hop beta acids), EPA Reg. No. 83623-2;
9. Mite Away Quick Strips (formic acid), EPA Reg. No. 75710-2; and
10. Zoecan Apistan Anti-Varroa Mite Strip (fluvalinate), EPA Reg. No. 2724-406

These general use products can be applied to individual beekeeper owned hives. If applying to hives other than those owned by the beekeeper, then a pesticide license is required. Visit the following pesticide regulations to learn about the pesticide applicator license: <https://www.mass.gov/files/documents/2017/10/30/333cmr10.pdf>.



## Crop Insurance/Risk Management Education Program

### 2020 USDA Programs to Assist Massachusetts Beekeepers

You are Covered for:	Low Amounts of Rainfall	Reduced Revenue	Colony Loss	Reduced Honey Yield
Program Name	Apiculture Crop Insurance (API)	Whole Farm Revenue Protection Insurance (WFRP)	Emergency Assistance for Livestock, Honeybees and Farm Raised Fish Program (ELAP)	Noninsured Crop Disaster Assistance Program (NAP)
Approximate Cost to Protect 10 Colonies	Depends on location, coverage level, productivity level and 2-month period covered 1/	Depends on the entire revenue of the farming operation	No Cost	\$325 (Administrative Fee) plus NAP "Buy-Up" Fee (if Buy-Up coverage selected)
What Triggers a Payment?	10-30% lower rainfall than average	15-50% insured losses to historical revenue	Any loss in excess of the national normal mortality factor (22%)	50 - 65% or greater yield losses, depending on coverage level.
How is Payment Calculated?	(% of insured loss rainfall) x 60-150% of \$107.89/hive	(% of insured lost revenue) x total expected revenue	Pays \$105/hive; \$193.50/colony and 60% of replacement feed costs	Varies depending on coverage level selected. Contact your FSA Office
Benefits for Beginning Farmers?	Reduced premiums, fees waived	Reduced premiums, fees waived	N/A	Administrative fee waived.
Deadline	Purchase by November 15, 2019	Purchase by March 15, 2020	After a disaster designation apply by November 1	Enroll by 12/1/2019
Coverage Available Through	Private Federal Crop Insurance Sales Agents	Private Federal Crop Insurance Sales Agents	USDA Farm Service Agency (FSA)	USDA Farm Service Agency (FSA)
Reporting Requirements	Payments sent automatically (no reporting requirements)	Report lost revenue within 72 hours of disaster occurrence	Report colony losses with 30 days	Report loss yield within 15 days

1/. You can purchase coverage levels from 70-90%. "Coverage level" refers to the percentage of average rainfall that triggers a payment. Most beekeepers choose 90%. At this level, if rainfall is below 90% of the average rainfall, you will receive an automatic payment. The value of your payment depends on the productivity level you select, from 60-150% of a base value. (Massachusetts base values for 2020 are \$107.89/colony).

\*To find an authorized Federal Crop Insurance Agents: <https://www.rma.usda.gov/Information-Tools/Agent-Locator-Page>

\*To find the USDA-FSA Office that serves your operation: <https://www.fsa.usda.gov/state-offices/index>

UMass Extension works in partnership with the USDA Risk Management Agency (RMA), the USDA Farm Service Agency (FSA) and various agricultural organizations to educate and inform Massachusetts producers about Federal Crop Insurance and Risk Management Programs. For more information, please visit [www.rma.usda.gov](http://www.rma.usda.gov) or contact UMass Extension Risk Management Educators Paul Russell at [pmrussell@umass.edu](mailto:pmrussell@umass.edu) or Tom Smiarowski at [tsmiarowski@umass.edu](mailto:tsmiarowski@umass.edu).



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